Attorney Docket No. 1046.1185

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Nobuharu IINUMA

Application No.: 09/124,231 Group Art Unit: 2674

Filed: July 29, 1998 Examiner: R. Laneau

For: DISPLAY APPARATUS INCLUDING SCREEN SAVER FUNCTION

APPEAL BRIEF UNDER 37 C.F.R §§ 1.191 AND 1.192

Assistant Commissioner for Patents
Washington, D. C. 20231

Sir:

Pursuant to the Appellant's Notice of Appeal, filed herewith, Appellant hereby appeals to the Board of Patent Appeals and Interferences from the Final Office Action, mailed April 13, 2004 (paper no. 29).

Appellant submits this Appeal Brief in triplicate as required by 37 C.F.R. §1.192(a) along with the filing fee of $330.00 set forth in 37 C.F.R. §1.17(f).

I. Real Party in Interest

Pursuant to 37 C.F.R. §1.192(c)(1), due to the assignment executed on July 9, 1998, by the inventor Nobuharu Iinuma, and recorded in the United States Patent and Trademark Office at Reel 011765, Frame 0639, the real party in interest is as follows:

Fujitsu Limited
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II. Related Appeals and Interferences

Pursuant to 37 C.F.R. §1.192(c)(2), although the real party in interest has other appeals and interferences, none of the other pending appeals and interferences is believed to directly affect or be directly affected by, or have any bearing upon the decision of the Board of Patent Appeals and Interferences in this appeal.

III. Status of Claims

Pursuant to 37 C.F.R. §1.192(c)(3), claims 1-19 are pending in this application at the filing of this Appeal Brief. Claims 1-19 stand finally rejected. Claims 1, 4, 6, 9, 10 and 14 are independent claims, and claims 2-3, 5, 7-8, 11-13 and 15-19 are dependent claims.

Claims 1-8 were originally filed in the application. In the Amendment filed December 4, 2000, claims 1-8 were amended and new claims 9-14 were added, and in the Amendment filed November 8, 2001, claims 1, 4 and 6 were further amended, and claims 9, 10 and 14 were amended for the first time. A Notice of Appeal was then filed December 26, 2002.

Thereafter, a Preliminary Amendment was filed with a Request for Continued Examination, on February 26, 2003, amending claims 1-14, actually broadening the claims, and adding new claims 15-19, while providing additional remarks against the then proffered combination.

After the Office Action of March 19, 2003, where nearly identical rejections were issued with the substitution of a different secondary reference, a response was filed June 9, 2003, requesting reconsideration of the rejections. A new Office Action was issued October 24, 2003, where another nearly identical rejection were issued, with the substitution of still a different secondary reference, resulting in the outstanding response of February 13, 2004, wherein applicants again requested reconsideration of the outstanding rejections and allowability of the claims.

In view of the final Office Action mailed April 13, 2004, claims 1-19 stand finally rejected. This Appeal Brief is an appeal of the finally rejected claims 1-19.

IV. Status of Amendments

Pursuant to 37 C.F.R. §1.192(c)(4), and as noted above, the pending claims have not been amended since the Amendment filed February 26, 2003.

Pursuant to 37 C.F.R. §1.192(c)(9), a copy of the claims involved in the appeal is included in their present condition, and reflecting the aforementioned amendments to the claims, in the Appendix. The Appendix further contains the remaining pending claims for the convenience of the Board.

V. Summary of the Invention

Pursuant to 37 C.F.R. §1.192(c)(5), the present invention is directed toward methods and apparatuses for controlling the display of a screen saver on a display. Essentially, the present invention places a controller and memory in the display, rather than solely in the body of a main computer apparatus.

For example, FIG. 1 of the present application illustrates a main computer apparatus having a standard CPU and graphic controller. Conventionally, the CPU and graphic controller would work in cooperation to provide a connected display screen saver display information to prevent images from being burnt into the screen of the display, as well as reducing power usage.

However, as further illustrated in FIG. 1, the display further includes a sub-controller ("flat panel controller 22") that runs a screen saver program to display screen saver information on the display screen, without image control by the main computer apparatus. FIG. 2 of the present application illustrates a more detailed example of the sub-controller, including a graphic processor 25, screen saver ROM 26, and screen saver driver ROM 27.

FIG. 4 of the present application also illustrates an advantage of the present invention over conventional systems, with the screen saver being operational while a CPU of the main computer apparatus is in a suspended operation. Conventional systems required the CPU to be active when screen savers were in operation.

VI. Issues

Whether claims 1-19 are patentable under 35 U.S.C. §103(a) over Kanno (U.S. Patent No. 5,602,567) in view of Sparks et al. (U.S. Patent No. 6,256,008).

VII. Grouping of Claims

Pursuant to 37 C.F.R. §1.192(c)(7), the claims are grouped as follows:

1. Claims 1-2, 6, 7, 9, 14, 15, 17 and 19 stand or fall together.

2. Claims 4, 10, 12-13, 16 and 18 stand or fall together.

3. Claims 3, 5, 8 and 11 stand or fall together.

VIII. Argument

1. Claims 1-2, 6, 7, 9, 14, 15, 17 and 19 are patentably distinguishable over a combination of Kanno and Sparks et al.

By way of example, independent claim 1 sets forth:

"A display apparatus, comprising:

a display screen displaying thereon image data sent from a main apparatus;

a memory unit storing thereinto screen protecting image data; and

a display control unit operable to control the screen protecting image data stored in said memory unit to be displayed on said display screen irrespective of an operation mode of the main apparatus,

wherein said display screen, said memory unit, and said display control unit are contained in a frame that is independent from a frame containing the main apparatus."

In the Office Actions mailed July 26, 2002, March 19, 2003, and October 24, 2003, the Examiner essentially has repeatedly argued that it would have been obvious to modify the display monitor of Kanno to store screen protecting image data in an internal memory, since a secondary reference discloses the use of screen savers. In the outstanding Office Action, the Examiner is relying on Sparks et al. as the secondary reference.

The Examiner has stated that Kanno discloses a display with a control unit 14 and memory 11 and 12, with the control unit 14 and memory 11 and 12 being in an independent frame separate from a computer frame. Thereafter, the Examiner points out that although Kanno failed to disclose a screen protecting data in the memory 11 and 12, Sparks et al.

disclosed that a screen saver program can be stored in memory, and that a combination of Kanno and Sparks et al. would disclose the presently claimed invention.

Specifically, the Office Action recites: "[i]t would have been obvious to one of ordinary skill in the art, at the time of the invention, to utilize the screensaver program disclosed in the Sparks et al. into the system of Kanno *because it would allow a user to enter a pre-programmed message that is animated on the screen during the screen savers operation.* (see col. 1, lines 45-47 and 53-55)." (Emphasis added).

However, Sparks et al. merely discloses a conventional screen saver program, with the capability of allowing someone to use the screen saver to send a message to the primary user of the computer. That message may be sent on a wireless paging system. See col. 2, lines 4-8, "[a]ccordingly, what is needed is a screen saving application that facilitates the limited use of an operating computer for the purpose of entering a secured message and possibly delivering that or another message to the computer user via a wireless connection."

Sparks et al. appears a bit difficult to understand, since the application makes continued references to "wireless screen saver," but the same reference would only appear to mean that the screen saver provides for the capability to send messages to primary computer user's wireless pager.

It is respectfully submitted that the interpretation given to Sparks et al., in the outstanding Office Action, may be incorrect or mistaken because of this repeated use of the term "wireless screen saver."

Regardless, Sparks et al. discloses nothing more than a standard screen saver application stored on a computer, except that the screen saver permits messages to be sent to the primary computer user from the screen saver program.

Thus, the basis of the outstanding rejection would appear to be that since Sparks et al. discloses a screen saver, and since Kanno discloses a display with a control unit and associated memory, it would have been obvious to modify the control unit and memory in Kanno to include a screen saver. The Office Action relies on the paging capability disclosed in Sparks et al. as a reason for modifying Kanno to include the same. However, other than the Examiner's opinion

that this features would be obvious to modify into Kanno, the record is absent evidence of motivation for such a modification.

In previous responses, appellant pointed out to the Examiner that at least there is no indication that monitor control CPU 14 of Kanno would be able or designed to run the screen saver program, that both Sparks et al. and Kanno appear to be teaching away from the presently claimed invention, and that only the present application provides the motivation, suggestion, or need to store "screen protecting image data" in a memory of a display monitor similar to that in Kanno.

Previously, in response to Appellant's previous arguments against a similar screen saver reference, Lundberg, U.S. Patent No. 5,738,527, the Examiner then merely summarized the same in saying that "[a]pplicant argues that there is no suggestion in either Kanno or Lundberg that a screen saver program be stored in the memory of a display. Contrary to applicant's arguments, it is not necessary that the references actually suggest, expressly or in so many words, the changes or improvements that applicant has made. The test for combining references is what the references as a whole would have suggested to one of ordinary skill in the art." The Examiner cites several cases to support his statement, including In re Sheckler, 168 USPQ 716 (CCPA 1071), In re McLaughlin, 170 USPQ 209 (CCPA), and In re Young, 159 USPQ 725 (CCPA 1968).

It is respectfully submitted that it would not have been obvious to modify Kanno, as proffered, and that the Examiner was incorrect in setting forth of what a prima facie obviousness rejection entails and what recent cases have specifically set forth for the same.

The Examiner bears the burden of establishing a prima facie case of obviousness based upon the prior art..."[the Examiner] can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would **lead** that individual to combine the relevant teachings of the references." In re Fritch, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992)(Emphasis added).

In addition, the mere fact that the prior art may be modified in the manner as set forth in the Office Action does not make the modification obvious unless the prior art suggested the desirability of the modification. Id. at 1783-84.

Further, despite the Office Action's attempt to evidence the obviousness modification rationale providing the Examiner's opinion of the underlying obvious, it is well settled that "the Board [and the Examiner] cannot simply reach conclusions based on [their] own understanding of experience - or on its assessment of what would be basic knowledge or common sense. Rather the Board [and Examiner] must point to some concrete evidence in the record in support of these findings." In re Zurko, 258 F. 3d 1379, 1386, 59 USPQ2d 1693, 1697 (Fed. Cir. 2001). See also In re Lee, 277 F. 3d 1338, 1344-45, 61 USPQ2d 1430, 1434-35 (Fed. Cir. 2002), in which the court required evidence for the determination of unpatentability by clarifying that the principles of *"common knowledge" and "common sense"* may only be applied to the analysis of evidence, rather than be a substitute for evidence. The court has also recently expanded their reasoning on this topic in In re Thrift, 298 F. 3d 1357, 1363, 63 USPQ2d 2002, 2008 (Fed. Cir. 2002).

Thus, accordingly, a prima facie obviousness rejection requires evidenced motivation from something concrete in the record that would lead one skilled in the art to combine the relevant teachings, again noting that the mere fact that the prior art may be modified in a particular manner does **not** make the modification obvious unless the prior art suggested the desirability of that combination.

In the later rejections, and outstanding rejection, the Examiner has massaged a combination of two cited references to read on the claimed invention when neither reference suggests or desires the same. In addition, neither reference proposes anything similar to the present application, which requires the memory storing the claimed screen protecting image data to be separate from the main apparatus, i.e., a display attached to the computer.

Rather, both Kanno and Sparks et al. actually teach away from the same, since both references use a computer and associated memory to control and store screen saver programs, with the computer transmitting the screen saver information to the display. Thus, the cited references can only disclose saving screen saver information in a main apparatus from a memory, in the main apparatus, storing the screen saver protecting image data.

In addition, there is no disclosure in either Kanno or Sparks et al. that the display disclosed in Kanno is physically configurable to display data stored in the cited RAM of the display frame. Thus, even if the screen saver program described in Sparks et al. were stored in

the RAM of the display of Kanno, there is no indication that the same would even work. Further, it would appear that the controller in Kanno is merely a conventional controller for controlling a display based solely upon received image signals from a main computer apparatus, and thus, not operable to run a screen saver program or present screen saver signals to the display without input from the main computer apparatus. Even if a screen saver program were installed in memory in the display of Kanno it would be impossible for the display to run the screen saver program or display a screen saver based on the same.

Further, to set forth a prima facie obviousness rejection, the rejection itself must include evidenced motivation, particularly point out where that motivation is disclosed, and particularly point how that cited motivation would lead one skilled in the art to modify Kanno, as proffered. Rather, the Office Action merely points out that Kanno discloses a display with an internal memory, and then indicates that because Sparks et al. teaches allowing a user to "to enter a pre-programmed message that is animated on the screen during the screen savers operation," it would have been obvious to include such a screen saver program in the display memory of Kanno.

However, the rejection fails to present the required motivation why one skilled in the art would have been led to make such a modification of Kanno or why one skilled in the art would have been led to set forth the presently claimed invention after absorbing the disclosures of both Kanno and Sparks et al. Only the present application provides this motivation.

In addition, the Examiner has pointed out that what is important is what would have been obvious from both Kanno and Sparks et al., rather than what each reference teaches individually. However, regardless of how the rejection is formulated, the same must still include some motivation for making the proffered combination. Rather, the Examiner has redesigned the invention of the present invention based on a reference that discloses a memory in a display and a reference that discuses the advantages of screen savers. Neither Kanno nor Sparks et al. disclose or suggest, in any manner, that it would have been advantageous to have a screen saver program stored in memory within a display.

Regardless of what the Examiner argues the Kanno and Sparks et al., in combination, would have taught one skilled in the art, their transformation into something similar to the presently claimed invention can only be based on improper hindsight.

Therefore, for at least this aspect, i.e., the use a screen saver feature in a memory of a display, the presently claimed invention included in independent claims 1, 6, 9 and 14 is patentably distinguishable over a combination of Kanno and Sparks et al. The claims depending from independent claims 1, 6, 9 and 14 are patentably distinguishable from a combination of Kanno and Sparks et al. for at least their dependence from independent claims 1, 6, 9 and 14.

2. Claims 4, 10, 12-13, 16 and 18 are patentably distinguishable over a combination of Kanno and Sparks et al.

Similar to the above discussion of claims 1, 6, 9 and 14, independent claims 4 and 10 include a similar screen saver feature in a memory of a display. Therefore, claims 4 and 10, as well as their dependent claims, are equally patentably distinguishable over the aforementioned combination of Kanno and Sparks et al..

In addition to claiming a display apparatus or a method of controlling a display apparatus, independent claims 4 and 10 are also directed to display systems, with independent claim 10 being directed to a portable computer. Thus, in addition to the above screen saver feature of the display apparatus, it is respectfully submitted that independent claims 4 and 10, including their whole display system features, are patentably distinguishable from the combination of Kanno and Sparks et al..

Similarly, claims depending from independent claims 4 and 10 are also patentably distinguishable from the combination of Kanno and Sparks et al., for at least their dependencies from independent claims 4 and 10.

3. Claims 3, 5, 8 and 11 are patentably distinguishable over a combination of Kanno and Sparks et al.

In addition, claims 3, 5, 8, 9 and 11 at least include an additional feature of a transmitting a control signal to the computer main apparatus to instruct the computer main apparatus to operate in a particular manner.

Claim 3, for example, requires the claimed display apparatus to include a main apparatus control unit "transmitting a control signal, to control the operation mode of the main apparatus, to the main apparatus under such a condition that the main apparatus is not actually operated for a predetermined time period."

Regarding claim 3, the Examiner has argued that Kanno "teaches a main apparatus (CPU) 1 which sends a signal from a communication between the computer and the display monitor (see col. 4, lines 43-45)." This portion of Kanno discusses that the computer 1 may inquire to the display about a permissible range of an adjustment item of the monitor circuit 10, and that the display monitor 2 receives the command, reads out the permissible range data, and sends the data back to the computer 1. The Examiner has cited the same portion of Kanno when rejecting claim 8, and does not address a similarly recited feature in claims 5, 9 or 11.

Conversely to the Examiner's proposition of what Kanno discloses, Kanno does not disclose this claimed feature of claim 3. Nowhere does Kanno discuss that a control signal can be sent from the monitor circuit 10, for example, to the main computer to control under such a condition that the main apparatus is not actually operated for the predetermined time period.

In addition, claim 5, for example, sets forth further features of: "upon a receipt of the control signal transmitted from said main apparatus control unit, the operation mode control unit changes the normal power consumption mode into the low power consumption mode," which is not even addressed in the outstanding Office Action. This feature is also included in claim 11, and similarly not addressed in the outstanding Office Action.

Therefore, claims 3, 5, 8 and 11 are patentably distinct from a combination of Kanno and Sparks et al..

IX. Conclusion

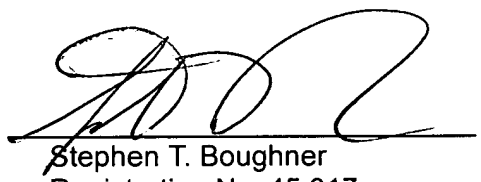
In view of the law and facts stated herein, the Appellant respectfully submits that the Examiner has failed to cite references or motivation supporting the outstanding obviousness type rejections.

For all the foregoing reasons, the Appellant respectfully submits that the cited prior art does not teach or suggest the presently claimed invention. The claims are patentable over the prior art of record and the Examiner's findings of unpatentability regarding claims 1-19 should be reversed.

The Commissioner is hereby authorized to charge any additional fees required in connection with the filing of the Appeal Brief to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

by: 

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X. Appendix

1. (THREE TIMES AMENDED) A display apparatus, comprising:

a display screen displaying thereon image data sent from a main apparatus;

a memory unit storing thereinto screen protecting image data; and

a display control unit operable to control the screen protecting image data stored in said memory unit to be displayed on said display screen irrespective of an operation mode of the main apparatus,

wherein said display screen, said memory unit, and said display control unit are contained in a frame that is independent from a frame containing the main apparatus.

2. (TWICE AMENDED) The display apparatus of claim 1, wherein:

said memory unit is a data rewritable memory, and the image protecting data is written into said memory unit from the main apparatus.

3. (TWICE AMENDED) The display apparatus of claim 1, wherein:

said display control unit provided on the side of said display apparatus comprises a main apparatus control unit transmitting a control signal, to control the operation mode of the main apparatus, to the main apparatus under such a condition that the main apparatus is not actually operated for a predetermined time period.

4. (THREE TIMES AMENDED) An information processing system, comprising:

a main apparatus processing image data; and

a display apparatus displaying the image data sent from said main apparatus on a display screen; wherein:

said main apparatus includes:

an image data storage unit storing image data to be displayed; and

a main display control unit causing the image data stored in the image data storage unit to be displayed on the display screen; and

said display apparatus includes:

a memory unit storing thereinto screen protecting image data; and

a sub-display control unit operable to control the screen protecting image data stored in said memory unit to be displayed on the display screen irrespective of an operation mode of the main apparatus,

wherein said display screen, said memory unit, and said display control unit are contained in a frame that is independent from a frame containing the main apparatus.

5. (TWICE AMENDED) The image processing apparatus of claim 4, wherein:

said main apparatus further comprises an operation mode control unit changing a normal power consumption mode of said main apparatus into a low power consumption mode;

said display apparatus further comprises a main apparatus control unit transmitting a control signal, to control the operating mode of the main apparatus, to said main apparatus under such a condition that said main apparatus is not actually operated for a predetermined time period; and

upon receipt of the control signal transmitted from said main apparatus control unit, the operation mode control unit changes the normal power consumption mode into the low power consumption mode.

6. (THREE TIMES AMENDED) A display apparatus, comprising:

a memory unit storing thereinto screen protecting data; and

a display control unit operable to control the screen protecting image data stored in said memory unit to be displayed on a display screen of the display apparatus irrespective of an operation mode of a main apparatus,

whereby when no access is made from the main apparatus to the display apparatus for a predetermined time period, an image produced from screen protecting image data is displayed on the display screen of the display apparatus, and

wherein said display screen, said memory unit, and said display control unit are contained in a frame that is independent from a frame containing the main apparatus.

7. (TWICE AMENDED) The display control apparatus of claim 6, wherein:

said memory unit is a data rewritable memory, and the image protecting data is written into the memory unit from the main apparatus.

8. (TWICE AMENDED) The display control apparatus of claim 6, further comprising:

a main apparatus control unit transmitting a control signal, to control the operation mode of the main apparatus, to the main apparatus under such a condition that the main apparatus is not actually operated for the predetermined time period.

9. (TWICE AMENDED) A display apparatus, comprising:

a display screen displaying thereon image data sent from a computer main frame, the computer main frame including a central processing unit, random access memory, a graphic controller and video random access memory;

a rewritable memory unit, separate from the random access memory and separate from the video random access memory, storing thereinto screen protecting image data; and

a display control unit, separate from the graphic controller, operable to control the screen protecting image data stored in said rewritable memory unit to be displayed on the display screen irrespective of an operation mode of the computer main frame, said display control unit transmitting a control signal, to control the operation mode of the computer main frame, to the computer main frame to instruct the computer main frame to not operate for a predetermined time period,

wherein said display screen, said rewritable memory unit, and said display control unit are contained in a frame that is independent from the computer main frame.

10. (TWICE AMENDED) A display system for a portable computer, comprising:

a computer main frame including a central processing unit, a graphic controller, random access memory, and video random access memory; and

a display apparatus including:

a display screen displaying thereon image data sent from said computer main frame,

a screen protecting data random access memory, independent from the random access memory and the video random access memory of said computer main frame, storing screen protecting image data, and

a display control unit, independent from the central processing unit of said computer main frame, operable to control the screen protecting image data stored in the screen protecting

data random access memory to be displayed on the display screen irrespective of an operation mode of the computer main frame ;

wherein said display screen, said screen protecting data random access memory, and said display control unit are contained in a frame that is independent from said computer main frame.

11. (ONCE AMENDED) The display system of claim 10, wherein the display control unit changes from a normal power consumption mode into a low power consumption mode then provides a signal, to control an operation mode of the computer main frame, to the computer main frame instructing the computer main frame to enter a low power consumption mode.

12. (ONCE AMENDED) The display system of claim 11, wherein the screen protecting image data is a screen saving program.

13. (ONCE AMENDED) The display system of claim 10, wherein the screen protecting image data is a screen saving program.

14. (TWICE AMENDED) A method of controlling a display apparatus, comprising:

displaying image data on a display screen sent from a computer main frame,

storing screen protecting image data in a screen protecting data random access memory, independent from a random access memory and a video random access memory in said computer main frame, and

displaying the screen protecting image data stored in the screen protecting data random access memory on the display screen irrespective of an operation mode of the computer main frame,

wherein said display screen and said screen protecting data random access memory are contained in a frame that is independent from said computer main frame.

15. (PREVIOUSLY PRESENTED) The display apparatus of claim 1, wherein the a display control unit is operable to control the screen protecting image data to be displayed on said display screen based on the operation mode of the main apparatus.

16. (PREVIOUSLY PRESENTED) The image processing apparatus of claim 4, wherein the sub-display control unit is operable to control the screen protecting image data to be displayed on the display screen based on the operation mode of a main apparatus.

17. (PREVIOUSLY PRESENTED) The display apparatus of claim 9, wherein the display control unit is operable to control the screen protecting image data to be displayed on the display screen based on the operation mode of the computer main frame.

18. (PREVIOUSLY PRESENTED) The display system of claim 10, wherein the display control unit is operable to control the screen protecting image data to be displayed on the display screen based on the operation mode of the computer main frame.

19. (PREVIOUSLY PRESENTED) The method of claim 14, further comprising:

displaying the screen protecting image data on the display screen based on the operation mode of the computer main frame.